

### Summary of Congressman Brooks' Provisions in the FY15 NDAA

### Section 12xx—Limitations on Providing Certain Missile Defense Information to the Russian Federation

This section would extend the sunset date on certain measures relating to the provision or prohibition on the provision of U.S. missile defense information to the Russian Federation. This section would also add a new prohibition on the transfer of velocity at burnout information to Russia.

# Section 12xx—Limitation on Availability of Funds to Transfer Missile Defense Information to the Russian Federation

This section would limit the use of funds in a fiscal year to transfer missile defense information to the Russian Federation unless the President has submitted a report to the congressional defense committees by October 31st of such fiscal year detailing discussions between the United States and Russia during the prior fiscal year.

#### Section 16xx—Liquid Rocket Engine Development Program

This section would express the sense of Congress that the Secretary of Defense should develop a next-generation liquid rocket engine that is made in the United States, meets the requirements of the national security space community, is developed by not later than 2019, is developed using full and open competition, and is available for purchase by all space launch providers of the United States.

This section would also direct the Secretary of Defense to develop a next-generation liquid rocket engine that enables the effective, efficient, and expedient transition from the use of non-allied space launch engines to a domestic alternative for the Evolved Expendable Launch Vehicle program. Of the funds authorized to be appropriated by this Act, \$220.0 million would be available for the Secretary of Defense to develop a next-generation liquid rocket engine. The Secretary would be required to coordinate with the Administrator of the National Aeronautics and Space Administration, to the extent practicable, to ensure that the rocket engine developed meets objectives that are common to both the national security space community and the civil space program of the United States.

The Secretary, in coordination with the Administrator, would be directed to deliver a report with a plan to carry out the development of the rocket engine, including an analysis of the benefits of using public-private partnerships, the estimated development costs, and identification of the requirements of the program to develop such rocket engine.

#### Nuclear command and control for enduring tanker aircraft

Requires the Chairman of the Joint Chiefs of Staff to provide a report to Congress regarding nuclear command and control for the KC 46 (aerial refueling tanker). Additionally, directs the Secretary of the Air Force to submit a plan to the congressional defense committees by November 1, 2015, to ensure that enduring tanker aircraft meet all requirements contained in CJCSI 6811.01C, as updated, related to nuclear command, control, and communications. The plan should include a schedule for updating all enduring tanker aircraft to meet any unmet requirements as well as associated costs and program details for such a plan.

#### Kestrel Eye Joint Capability Technology Demonstration

The committee fully supports the U.S. Army Space and Missile Defense Command program called Kestrel Eye. Kestrel Eye is a Joint Capability Technology Demonstration of a nanosatellite-class imagery satellite that is designed for tactical ground forces. The satellite will provide the warfighter, in the field, a capability to directly task and receive operational data from a space-based collection system. The imagery intelligence will support rapid situational awareness.

The committee is aware that this is a technology demonstration in development and has not launched into orbit yet. The committee encourages the Department of Defense to find a suitable space launch opportunity to enable the Army to complete a military utility assessment to evaluate the operational value of this capability.

The committee directs the Secretary of the Army, in coordination with the Chairman of the Joint Chiefs of Staff, to provide a briefing to the House Committee on Armed Services, within 180 days of initial operating capability, on the military utility assessment of Kestrel Eye.

#### Oversight of United States-Russian Federation Missile Defense Cooperation Discussions

In the committee report (H. Rept. 113-102) accompanying the National Defense Authorization Act for Fiscal Year 2014, the committee directed the Secretary of Defense, Secretary of State, and the Director, Missile Defense Agency to brief certain congressional committees on (1) missile defense discussions between the United States and the Russian Federation; (2) the use of missile defense declassification authority by Director, Missile Defense Agency; and (3) the declassification of certain missile defense information.

The committee directs that this information provided to the congressional committees pursuant to H. Rpt. 113-102 be updated by the Secretary of Defense, in coordination with the Director, Missile Defense Agency and the Secretary of State, and be reported to the congressional defense committees, the Committee on Foreign Relations of the Senate, and the Committee on Foreign Affairs of the House of Representatives not later than August 1, 2014.

Additionally, at the March 25, 2014, House Committee on Armed Services Subcommittee on Strategic Forces hearing on the President's fiscal year 2015 budget request for missile defense, the Deputy Assistant Secretary of Defense for Nuclear and Missile Defense Policy stated, "[w]ith regard to talks with Russia on transparency and cooperation, Russia's intervention in Ukraine in violation of international law led to the suspension of our military-to-military dialogues, including [Department of Defense] civilians, and we have subsequently not continued to engage Russia on the topic of missile defense."

The committee directs the Secretary of Defense to notify the House Committee on Armed Services not later than one week after the Department of Defense resumes any missile defense discussion with the Russian Federation.

#### Conventional Prompt Strike Capability Research, Development, and Acquisition

The committee is aware that in testimony before it on April 2, 2014, the Commander, U.S. Strategic Command stated:

"Conventional Prompt Strike (CPS) capability offers the opportunity to rapidly engage high-value targets without resorting to nuclear options. CPS could provide precision and responsiveness in Anti-Access Area Denial environments while simultaneously minimizing unintended military, political, environmental, economic, or cultural consequences. I support continuing research and development of these important capabilities."

The committee agrees. The committee recognizes the success of the Army's Advanced Hypersonic Weapon (AHW) test conducted on November 17, 2011, though it notes the failures of the Hypersonic Technology Vehicle tests. The committee is also aware of the planned flight test 2 of the AHW technology development system that will demonstrate operationally suitable ranges and performance as well as additional technologies needed to support continued development of this capability.

The committee is aware that following flight test 2, the Department of Defense plans to examine the feasibility of deploying a hypersonic prompt strike weapon on a submarine platform. The committee believes it is prudent to undertake these efforts but is concerned about the budget sufficiency to do so. The committee is also concerned that there is no clear development path of an Army system. The committee believes that a third flight test of the AHW system could provide useful information to inform decisions about such a development path.

The committee is also concerned that with the budget request for fiscal year 2015, and the Future Years Defense Program, there is not sufficient funding requested and planned for the transition of this technology to a military service for a full-scale development and acquisition program when the technology has reached appropriate maturity.

The committee notes that the 2010 Nuclear Posture Review stated that the Administration planned to deploy these capabilities, "while not negatively affecting the stability of our nuclear relationships with Russia or China." The committee agrees with this policy. The committee also notes that it directed the Secretary of Defense to provide a report on any policy considerations concerning any potential ambiguity problems regarding the launch of a conventionally armed missile from submarine platforms and any potential verification measures that may be pursued in the Joint Explanatory Statement (Committee Print No. 2) accompanying the National Defense Authorization Act for Fiscal Year 2014. The committee has not yet received this directed report; it expects to receive a detailed understanding of how the Department plans to evaluate and resolve these potential problems, including potential cooperative measures.

The committee is also concerned that there does not appear to be an Army development program in the Department's plans, notwithstanding the fact that the only success the United States has seen with these technologies is the Army's AHW demonstrator. The committee believes it is prudent to consider whether a third flight test of the AHW could contribute to the Department's understanding of the feasibility of an Army development path.

The committee therefore directs the Under Secretary of Defense for Acquisition, Technology and Logistics, jointly with the Chairman, Joint Chiefs of Staff, to submit a report to the congressional defense committees not later than February 1, 2015, that includes the

following: a detailed plan for the future of CPS, including an estimated timeline for completion of current research and development activities and associated projected cost; a determination about which additional strategic infrastructure technologies and enabling capabilities may be required to support CPS; opportunities for inter-service collaboration in development of common technology; opportunities and efforts to transition technologies developed under this program to current and future weapons systems; a date by which CPS programs will be transitioned to military services for full development and acquisition; an assessment of the utility of a third AHW flight test; an assessment of the key technologies that could be demonstrated through a third development test; and, an updated assessment of threat for which the military requirement for this capability was validated.

#### Revision to the Integrated Master Test Plan

The committee believes that the reliability and warfighter confidence in the Ballistic Missile Defense Midcourse Defense Segment, also called the Ground-based Midcourse Defense (GMD) segment, could be enhanced through more frequent flight and intercept testing.

According to the "Plan to Increase the Rate of Ground-Based Midcourse Defense Flight Tests" submitted to the congressional defense committees in October 2013 in accordance with the requirements of section 231 of the National Defense Authorization Act for Fiscal Year 2013 (Public Law 112-239), an increase in test cadence to three test events every 2 years will "require an increase in test resources and personnel." The committee believes such resources could increase warfighter confidence and the reliability of the nation's operationally deployed homeland missile defense capability if this test cadence is feasible and efficient.

Therefore, the committee directs the Director, Missile Defense Agency (MDA), in coordination with the Director, Operational Test and Evaluation, to provide a report to the congressional defense committees following the FTG-06b intercept test, if successful, on the benefits and risks of revising the Integrated Master Test Plan presently in force and future submissions of the plan, to achieve GMD tests at a frequency of not less than every nine months. The committee also directs the Director, Missile Defense Agency to include in the budget request for fiscal year 2016 an illustration of the funding required, if appropriate, to meet this enhanced GMD test cadence.

#### Standard Missile 3 Block IB

The committee is concerned by the reduction in funding for the Standard Missile 3 (SM-3) program in fiscal year 2015 and across the Future Years Defense Program (FYDP). After demonstrating success in five of five intercepts in 2013 and with a Full Rate Production decision planned for fall 2014, the Department now has reduced programmed quantities each year to fewer than were funded in fiscal year 2014 in Low Rate Initial Production. The committee believes such a reduction injects inefficiency into the production line and that inefficiency may unnecessarily increase the per unit cost of these interceptors.

At the same time, the committee is not aware of any diminishment in requirements by the combatant commanders for these interceptors. The committee supports the funding requested in the budget submission for Advanced Procurement to support long-lead time requirements for these missiles. The committee also supports the likely request in the fiscal year 2016 budget request for multi-year procurement authority for these missile interceptors. The committee

believes that a successful negotiation between the Missile Defense Agency and its contractors could drive down the per unit cost of these interceptors and increase the available quantities to the warfighter.

The committee directs the Director, Missile Defense Agency to provide a briefing to the House Committee on Armed Services not later than October 1, 2014, on the sufficiency of current and programmed inventory of SM-3 missiles to meet combatant commander requirements, the number of Requests for Forces received from combatant commanders in 2012-13 for SM-3 interceptors, and the shortfall in interceptors in each year of the FYDP.

## Report on Reliability, Modernization and Refurbishment of the Ground-based Midcourse Defense Segment

The committee recognizes the shift in the Administration's missile defense policy to a priority on homeland defense as evidenced by the March 2013 Secretary of Defense announcement, made in response to an escalating intercontinental ballistic missile threat, to increase the ground-based interceptor (GBI) fleet by nearly fifty percent by 2017. The committee supports this position; however, there is concern that the Administration has not made a commensurate shift in funding for the Ground-based Midcourse Defense (GMD) system to address long-standing issues that have manifested themselves in flight test failures, degraded reliability, escalating obsolescence, and erosion of margin of capability over the threat. The committee notes that the GMD system is approximately 10 years old and was originally designed for a 20-year service life. The committee supports efforts to close the gap between what it believes is needed as necessary investment in the GMD system and the proposed funding levels contained in the budget request.

Therefore, the committee directs the Director, Missile Defense Agency to provide a report to the congressional defense committees not later than November 1, 2014, that evaluates the necessary resources to maintain the GMD system in future years to achieve no less than standard industry practices for strategically important peer systems (such as Minuteman, Trident D5, Terminal High Altitude Area Defense, and Aegis Standard Missile-3) for fleet upgrades, reliability confidence, obsolescence mitigation, and service-life assurance of capabilities against a threat that is growing in quantities and sophistication. The report should include, but not be limited to:

- (1) Action plans, schedule, and by-year budget required to improve overall GBI fleet reliability and incorporate lessons learned from all ground and flight test failures into the existing fleet and in-process assets;
- (2) Action plans, schedule, asset line-of-balance allocations, and by-year budget required to conduct a robust systems engineering approach for GBI ground testing to ensure confidence in system reliability, capability, and long-term sustainment. This should include robust GBI integration testing, Stockpile Reliability, Aging and Surveillance, Highly Accelerated Life Testing, and Highly Accelerated Stress Screening;
- (3) Action plans, schedule, and by-year budget required to modernize and improve the GMD Ground System to ensure its sustainability for the operational life. Areas addressed should include technology refresh of obsolete components and technologies, modernized electronics architectures to eliminate single point failures and improve reliability, replacement of Ada software with a modern supportable and sustainable language, and fully incorporate the improved capabilities planned in the Enhanced Kill Vehicle Re-design and the Long Range Discrimination Radar;

(4) By-year procurement budget requirements for various lot-buys for the additional 14 GBIs that the Secretary of Defense announced in March 2013, and include the associated long-lead procurement budget requirements and timeline to support, and impacts on the industrial base.

#### Improved Turbine Engine Program

The committee continues to support the budget request for the Improved Turbine Engine Program (ITEP). ITEP is a competitive acquisition that is based on current research efforts and is designed to develop a more fuel efficient and powerful engine for the current Black Hawk and Apache helicopter fleets. The committee notes the benefits of improved fuel efficiencies through lower, specific fuel consumption that ITEP brings to the battlefield. In addition, the committee encourages the Army to consider maintenance and sustainment costs for ITEP and specifically, how these calculations would drive affordability of the program.

The committee believes it is important that ITEP transition from Science and Technology to the Preliminary Design phase of Engineering and Manufacturing Development as soon as possible. Providing adequate funding for ITEP to maintain or accelerate the schedule will reduce risk and ensure continued program advancement and success. The committee encourages the Army to maintain its schedule to control development and program costs, mitigate technical risk, validate performance, and ensure the warfighter receives the best possible solution.

The committee, however, believes that the ITEP Business Case Analysis and Cost Estimate may be outdated and is concerned that it might not sufficiently factor in the total fuel savings or maintenance and logistics cost savings associated with the engine. Therefore, the committee directs the Secretary of the Army to brief the House Committee on Armed Services by December 1, 2014, on a path to update the study.

## Section 1221—Limitation on Military Contact and Cooperation between the United States and the Russian Federation

This section would prohibit the use of funds for fiscal year 2015 for bilateral military-to-military contact or cooperation between the United States and the Russian Federation until the Secretary of Defense, in consultation with the Secretary of State, certifies to the appropriate congressional committees that Russia is respecting the sovereignty of Ukrainian territory, no longer acting inconsistently with the Intermediate-range Nuclear Forces Treaty, and in compliance with the Treaty on Conventional Armed Forces in Europe. This section would include a waiver for the Secretary of Defense, pending a notification, in coordination with the Secretary of State, to the appropriate congressional committees that such contact or cooperation is in the national security interest of the United States and a period of 30 days has elapsed following the notification.

The committee notes that at the time this report was filed, the Secretary of Defense has suspended military exercises, bilateral meetings, port visits, and planning conferences between the Armed Forces of the United States and Russia in response to ongoing Russian aggression towards Ukraine. The committee believes that U.S.-Russia military contact and cooperation must remain suspended so long as Russia continues its aggression towards Ukraine and continues to take actions inconsistent with its treaty obligations.

#### High-altitude intelligence, surveillance, and reconnaissance

Over the past 2 years, the committee has supported the Global Hawk Block 30 high-altitude unmanned aerial system and supports the current Department of the Air Force plan to retain the Global Hawk Block 30 for the high-altitude intelligence, surveillance, and reconnaissance (ISR) mission. The committee notes that the Department of the Air Force has determined that Global Hawk operating costs have decreased while the Global Hawk Block 30 fleet has flown an increased number of hours compared to previous years in support of the combatant commanders.

While the committee was pleased that the Air Force requested funding for Global Hawk Block 30 in the budget request for fiscal year 2015, the committee is concerned with the Department of the Air Force's plan to retire the U-2 fleet in fiscal year 2016. While the committee realizes that the Department can never fully meet the ISR demand of combatant commanders, reasonable and necessary ISR requests appear very likely to go unfilled if the current high-altitude airborne ISR collection capabilities of the U-2 are terminated. The committee notes that section 143 of the National Defense Authorization Act for Fiscal Year 2014 (Public Law 113-66) required the Secretary of Defense, in coordination with the Chairman of the Joint Chiefs of Staff, to submit a report on all high-altitude ISR systems. The committee has not yet received this report and believes that any action to retire, or prepare to retire U-2 aircraft would be premature prior to the committee's review of the report. To ensure that no actions are taken to retire or prepare to retire the U-2 aircraft in fiscal year 2015, elsewhere in this Act, the committee includes a provision that would prohibit the obligation or expenditure of funds authorized to be appropriated by this Act or otherwise made available for fiscal year 2015 to make significant changes to retire, prepare to retire, or place U-2 aircraft in storage. The committee also notes that section 133 of the National Defense Authorization Act for Fiscal Year 2012 (Public Law 112-81) limits the retirement of U-2 aircraft until equal or greater ISR capability is available to commanders of the combatant commands, and believes that the Department of the Air Force plan to retire the entire fleet of U-2s in fiscal year 2016 is inconsistent with this provision.

The committee supports the Department of the Air Force efforts to upgrade the Global Hawk Block 30 aircraft to meet the requirements of the combatant commanders, but notes that this will take several years beyond the planned retirement of the U-2. In light of the known gaps, the committee has concerns with any plan that will leave the combatant commanders with less overall capacity and capability than they have today.

Therefore, the committee directs the Secretary of the Air Force, in coordination with the Chairman of the Joint Chiefs of Staff, to provide a report to the congressional defense committees and the congressional intelligence committees by February 16, 2015, that would establish a phased high-altitude airborne ISR transition plan which fields capability at the same time or before the U–2 aircraft retirement, and which would result in equal or greater capability available to the commanders of the combatant commands. This plan should include the costs, schedule, and identification of fielded high-altitude ISR capability and capacity. If retirement of the U-2 would result in decreased capability or capacity for highaltitude reconnaissance, the report should also include the Department of the Air Force plans to mitigate the effects of the decreased capability or capacity.

#### Body armor industrial base risk mitigation

The committee understands that the body armor industrial base includes the combat helmet industrial base, soft armor industrial base, and hard body armor industrial base. In the committee report (H. Rept. 112-479) accompanying the National Defense Authorization Act for Fiscal Year 2013, the committee directed the Secretary of the Army to provide an assessment of the long term sustainment requirements for the body armor industrial base, to include supply chains for combat helmets, soft armor, and hard armor components. The committee received this assessment in March 2014.

The committee understands that the military services would prefer to maintain at least two viable industrial base vendors for each area of the industrial base in order to mitigate serious risk, maintain competition for better body armor technology, as well as to retain required surge capacity. The committee is concerned that current funding profiles may not allow for two viable vendors in each area. The committee understands that without additional resources or additional contracts the industrial base would default to only one supplier in August 2015. The committee understands that specialty materials such as ballistic fibers and ceramics are raw material building blocks for body armor systems, and that few profitable applications for these materials exist outside of Department of Defense body armor programs. While foreign military sales (FMS) could offer industry an additional means for the manufacture and sale of various body armor components, there has been limited FMS interest from foreign countries.

Based on this required assessment, as well as other assessments the committee has reviewed from the Defense Logistics Agency, the committee understands that there is significant risk to the hard armor industrial base both in the near-term and the long-term. The committee is concerned that the two qualified manufacturers are producing at below minimum sustaining rates, and that this could jeopardize their financial stability and viability beginning in fiscal year 2015. The committee also notes that one of the hard armor vendors is the sole supplier of a particular ceramic raw material to the Department of Defense and believes that the Department of Defense may lose the capability to meet surge requirements beginning in fiscal year 2015. The committee is concerned that once a capability, such as hard body armor, disappears and production lines are dismantled, it is projected that it would take at least 18 months to reconstitute that capability.

Elsewhere in this Act, the committee recommends an increase of \$80.0 million in operation and maintenance, Army, to help mitigate risk to the hard armor industrial base and maintain two viable vendors.

#### Soldier protection system and weight reduction for personnel protection equipment

The budget request contained \$27.8 million in PE 64601A for Infantry Support Weapons. Of this amount, \$7.5 million supports the continued development of the Army's Soldier Protection System (SPS). Elsewhere in this report, the budget request contained \$63.1 million in Operations and Maintenance, Army for the initial procurement of SPS components.

The SPS provides a lighter weight modular, scalable integrated system of mission tailorable personnel protection equipment (PPE) while also improving the level of mobility, form, fit, and function for both male and female soldiers. The committed is aware the SPS includes subsystems such as protection for the head, eyes, extremities, torso, and other integrated sensor packages. The committee notes a milestone C decision is expected in fiscal year 2015. The committee notes the Army would field to two to three brigade combat teams per year and has programmed approximately \$575.0 million for SPS across the Future Years Defense

Program. While the committee commends the Army on their SPS effort, the committee encourages the Army to provide enough funding to maintain two vendors for competitive purposes, and also encourages the accelerated fielding of SPS to all soldiers.

The committee has long championed the importance of reducing the weight of current body armor and personnel protection equipment systems, as well as stressing the critical need for robust investment in weight reduction initiatives, along with technology insertions to improve performance and survivability. The committee believes current body armor systems provide outstanding protection to the warfighter, but their weight contributes to the over-burden issue and decline in performance. The committee understands that body armor system weights have remained relatively constant over the last decade in spite of advances in materials technologies because protection levels have also increased in response to threats.

The committee commends the Army for addressing this challenge by shifting from a more discrete component level development strategy to a more systems engineering and system level approach to body armor and PPE development as a means to improve soldier capabilities. The committee believes the Department must maintain significant investment in near-term solutions that can effectively reduce the weight of body armor, while also investing in the development of revolutionary new material technologies that could provide for significant breakthroughs in weight and performance.

The committee recommends \$7.5 million in PE 64601A for SPS, and elsewhere in this report recommends \$63.1 million for the procurement and fielding of SPS.